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From the Spirit of '76.

INDIAN CORN.

The plant which contributes in the greatest degree to national subsistence, best deserves the patronage of skill and industry; and yet the cultivation of maize remains as it was borrowed from the aboriginal farmers of America, except, that if product is the test of science, they must be allowed to have been more accomplished husbandmen than their imitators. As the Indians certainly made better crops to the acre, and preserved the earth in better heart, than we do, we may at least hope to accomplish a degree of perfection, which from their success we know to be attainable, however deterring may be the prospect of our ability to improve upon it. If indeed we could be persuaded to relinquish what we have retained of this indigenous system, and to draw one from scientific principles and European experience, perhaps we might recover the palm in the cultivation of maize, from those to whom we have ourselves assigned it by a special cognomination.

Neither in theory nor practice, in Europe or elsewhere, did we ever hear of condemning land perpetually to severe crops, two years out of three, without aiding it by any species of manure. But if we add to this system the two items with which it is usually attended; one, close grazing the year of rest as it is called, (a rest like that enjoyed by a man first stunned with blows and then trampled to death); the other, frequent ploughings of two or three inches deep, to let in sun and keep out atmosphere as much as possible, it would be viewed as the most com-

plete agricultural caricature hitherto sketched by the finest fancy for the ridiculous.

In England, a thorough manuring universally attends a fallow crop; the effects of which is a medium product of wheat, of about thirty bushels to the acre. Let manuring attend maize as a fallow crop, and we follow this example. To come up to it, however, we must get our land into equal heart with theirs, when it receives this manuring; and then we shall be able fairly so estimate the value of Indian corn. In its cultivation, the first improvement required, is therefore to manure it at the usual rate of other fallow crops.

The second is to plough vastly deeper than we plough at present. In our dry and hot climate, the preservation of the moisture and the inhalation of the atmosphere, are sufficient reasons for this. To these are to be added, the deepening of the soil, and an increase of pasture for the plant. The maize is a little tree; and possessing roots correspondent to its size, these roots will of course strike deeper, both to procure nourishment, and to strengthen this small tree against severe winds. It follows with a great degree of probability, that this large plant requires deeper ploughing than a smaller one. Yet we plough shallower in its cultivation, than the people of Europe do in cultivating wheat.

I shall here endeavour to prove the truth of a pair of paradoxes. One, that shallow ploughing increases; the other, that deep ploughing diminishes labour. A single observation almost suffices to sustain both. By shallow ploughing, the seeds of grass and weeds, are kept near the surface throughout the year, locked up by frost, drought or immersion, ready to sprout up on the occurrence of every genial season, when they appear in millions, and instantly require the plough, however recently used; by deep ploughing if skilfully done, the seeds which abound most near the surface, are deposited below a depth of earth, which they penetrate but slowly and in small numbers, so that the repetition of ploughing is far less necessary.

One or two deep ploughings, according to the nature of the soil, will with the subsequent use of the skimmer or the harrow, serve to make the crop; in place of which at least four or five shallow ploughings, with the same aid, will often destroy it.

To demonstrate the difference in point of labour, I will describe the tillage of corn as I practise it to some extent, and leave the reader to make the comparison in his own mind, with the usual mode of cultivation.

The rows are never ploughed but in one direction, cross ploughing being wholly abandoned. Their width is five and a half feet. The field being once thrown into the position of ridges and furrows, never requires to be laid off again. The furrow is left as deep as possible; and when the field comes again into tillage, the list or ridge is made upon this furrow, so that there is a regular alternity between ridges and furrows. If the soil is of a friable nature, a large plough drawn by four horses, and cutting a sod about twelve inches wide and eight deep, is run on each side of this old furrow, and raises a ridge on its centre, on which to plant the corn. The old ridge is split by a large trowel hoe plough, having a coulter on the point, and two mould boards, drawn by 4 horses, and cutting ten inches deep. If the soil is stiff or tough with turf, the first plough with four horses, ridges or lists on the old water furrow, with four furrows of the same depth and width. On the summit of this ridge or list, a deep and wide furrow is run with a trowel hoe plough and two mould boards, in which the corn is planted and covered about three inches deep with the foot. The planting is guided by a string carried across the ridges, with coloured marks at the distance apart intended for the corn.—This furrow is a complete weeding of the ridge previous to planting, which it should barely precede. The corn receives no more ploughing, until it is thinned and hand hoed along the rows about two feet wide. After this a deep furrow is run on each side of it by a large plough drawn by two horses, with a mould board causing the earth thrown out of it to meet at the

corn, tho' the furrow is a foot from it. Thenceforth the tillage consists of a break or furrow of a mere weeding plough called a skimmer, cutting with two wings twenty-four inches, drawn by one horse; and of a central deep and wide furrow made with a trowel hoe and two mould boards, drawn by two horses; to be repeated when necessary. The whole to be concluded with a narrow weeding or hand hoeing along the slip in the direction of the row, not kept completely clean by the skimmer.

The judicious reader will discern, that the effects of high ridges and deep furrows in cultivating the corn are numerous. The corn is planted immediately over the furrow of the preceding crop, and by completing the reversal of the ridge early in its culture, it grows upon a depth of tilth three or four times exceeding what is attained by planting and cross ploughing in the usual mode. Its roots are never cut in one direction, and this great depth of tilth thus early obtained, by superseding the occasion for deep ploughing in the latter period of its growth, saves them in the other. The preservation of the roots, and their deeper pasture, enables the corn much longer to resist drought. The litter of inclosed grounds thrown into the deep furrow upon which the corn list is made, is a reservoir of manure, far removed from evaporation, within reach of the roots, which will follow it along the furrow; and calculated for feeding the plant in droughts. The dead earth brought up by the plough from the deep furrow, is deposited on each side of it, without hurting the crop on the ridge, and with the bottom of the furrow remains four years to be fructified by the atmosphere, so as to escape the present loss sometimes accruing from mingling too much dead earth with the soil by deep flat ploughing, and yet to mellow and deepen it more rapidly. And much labour is saved in planting the corn, whether the hoe is used after a string, or the string is carried across furrows previously made on the ridge.

In all lands unable to produce forty bushels of corn to the acre, the considerations of produce and saving la-

bour united, have determined the proper distance to be five and an half feet square, with two or three stalks at each station, except in poor spots, where one will suffice. If it can produce that crop or more, I have planted it at the distance of five feet six inches, by two feet nine, leaving two stalks in sandy, and three in stiff lands. Deep ploughing in one direction, by shielding the corn against drought, and saving its roots, allows it to be planted thicker than usual.

Young's experiments have ascertained that fallow crops are more profitable than naked fallows. Several superiorities of Indian corn over the fallow crops used in England have been noticed. The following are I believe, omitted. The high ridges produced by the mode of cultivation I have adopted, double the surface exposed to the atmosphere, and lessen by one half that exposed to the sun, so as to increase inhalation, and diminish exhalation very considerably. No other fallow crop will enable us to obtain these benefits by the agency of the plough, because none of them will admit of being drilled sufficiently wide apart, nor admit of an equal use of the plough.

Corn is a fallow crop, peculiarly adapted to co-operate with the system of inclosing, whereas a fallow for wheat, by which an ungrazed lay of grass, weeds, or even of red clover is turned under, frequently defeats the hopes of the farmer. Hence he is seduced into the ruinous practice of feeding off his clover before he commences his fallow ; a practice under which very rich land only will improve. Whereas the heaviest cover, turned under by a large plough and four horses, is a pledge for good crops both of corn and wheat, owing to the quality of the former, of thriving upon the food yielded by coarse litter, and the time gained during its growth, for reducing this litter to proper food for the latter.

The winter's manure like this litter, is also made more extensively beneficial to a crop of wheat, than if it had been exposed to putrefaction throughout the summer ; because whatever escapes into the atmosphere during a

violent summer's fermentation, is lost both to the earth and to the crop of wheat; whereas the fermentation is less violent when this litter is mingled with the earth, which catches a portion of its fertilizing qualities as the slow putrefaction proceeds, and less of the manure is lost when the wheat is sown, than if rotted in a body, whereby much of it is dissipated in the atmosphere; a dissipation which corn partly prevents and partly saves.

The manure made on the winter's farm pen, remains wet, cold, and unrotted until the month of April, and when composed of corn stalks is of a rough and hard nature. Yet land covered with fifty loads and sown with one bushel of gypsum to an acre, will produce threefold more corn than in its natural state; and this crop is made in five months; a space just sufficient to reduce the coarse litter to a pabulum proper for wheat. The better this coarse litter and the earth are divided and mingled the less will be the fermentation, and the greater the crop. The sudden growth of the corn, demonstrates a vast benefit to be derived from litter as coarse and hard as corn stalks, whilst the degree of their putrefaction is inconsiderable, and consequently the vast loss sustained by completing this putrefaction, without gaining a valuable crop from its process. After the process of fermentation and putrefaction is finished in the earth, the residuum is the same, as if it had been finished out of the earth; besides this residuum, supposed by the old theory of compounding, stirring and rotting dunghills, to contain all the fertilizing qualities of vegetable matter, Indian corn enables us to reap a rich harvest of bread stuff, from the process towards it.

The same property of Indian corn presents us also with a vast addition to our vegetable matter for manure. The crop of offal, as well as that of food, is augmented threefold by the matter separated from coarse litter in reducing it to manure proper for wheat. This of itself exhibits the vast preference of corn as a fallow crop, to the application of rotted manure to a naked fallow for wheat. No two crops can be so exactly fitted for ad-

vancing a good system of agriculture. The coarse organs of the one, relishes the food rejected by the delicate organs of the other, and by the economy of saving what would otherwise be lost, not only enables us to obtain an additional crop, but by increasing our means for raising manure in a three fold ratio, must have the effect of increasing the crops of wheat themselves, far beyond the confines to which they are limited by naked fallows.

The reader will remember that Indian corn is to be planted on a high ridge, and that cross ploughing is excluded.—These ridges should run north and south, to equalize both the benefits and injuries derived from the sun. The injury suffered by a flat surface from it excessive heat, would be rather increased than diminished, by exposing the face of the ridge to the south, whilst its northern aspect would lose the benefit of its genial warmth. These high ridges have another important effect. However steep the declivity, we never see the roots of trees, shrubs or grasses, penetrating through ground into the atmosphere It is of course evident that they recoil from one element, and bend towards their food in the other, wherever it is to be found. By the position of the corn on high ridges from its infancy, the roots on approaching the declivity on each side, are trained to run lengthways of the ridge, and thus escape the injury they would otherwise sustain by getting into the range of the deep middle furrow.

The reader must observe, that the ground intended to be manured for Indian corn is fallowed in the winter; that after the rest of the crop is planted, and not before, this manure is carried out, ploughed in, and the corn to be benefited by it, planted; and that before it receives any ploughing, the corn is to be thinned and wed or handhoed. This process will bring us into June, and allow an interval for recruiting the teams, when clover is in its best state for that end. By this time the corn is from eight to twenty-four inches high. At this juncture the deep furrow before mentioned, on each side of it, being run, narrows the ridge for about eight days, until it is

again widened by the middle furrow; and that space will suffice to give to the corn roots the longitudinal direction, which shields them against all injury; this furrow being the only deep one received by the corn after it is planted (the water furrow excepted out of the way of which the roots are thus trained) being bestowed on it whilst it is young and its roots short, and being run near a foot from it, the roots of the corn, by this mode of culture, wholly escape injury, and the effects of drought on the plant being thus diminished, its product is increased.

The first ploughing which is to answer the end both of a fallow, and a list or ridge on which to plant the corn, is by far the most material part of the system, and indeed the only good security for its success. It must be deep and wide, so as to overturn into the old water furrow a considerable mass of the litter produced by inclosing, whether weeds or clover. This mass, in addition to its being a reservoir of food, gradually supplying the corn during the summer as it putrefies, operates powerfully in preserving the friability and mellowness of the earth, by the passage of the air perpetually escaping from it, thro' its tegument, into its congenial element. By this process, the propensity of hard and cold soils to run and bake, is removed or diminished; a propensity which is encouraged in the highest degree by shallow ploughing on naked or grazed fields. And by the same process, the inconveniences of a mass of dry litter on inclosed fields, combined with shallow ploughing, are also avoided; because it is so well buried that the corn is planted above it, and sprouts in a bed of clean earth.

The accidents to which Indian corn is liable, are far inferior to those of any other farinaceous plant, and less remediless. It comes up better; it may be re-planted and at last it may be transplanted. This last precaution for ensuring a crop is executed with little labour, by planting a portion of it very early in the quarter of the field where it will vegetate and grow quickest, somewhat thicker, to furnish plants; and by transplanting those drawn out in thinning in moist weather, or after a sea-

son, as the tobacco makers say. The corn plants will live better than those of tobacco or any other herb I ever tried, and may be transplanted until they are eighteen inches high. The large plants will be equal to the smaller and later planted corn. Indeed I often fill up vacancies by setting the plants of the same field as it is thinned, and always thin as I set, to avoid a double perambulation. A pointed stick both aids in thinning and in setting the corn, which is done nearly as rapidly as tobacco is planted

I repeat a fact which most people know, to remove an objection against the very deep ploughing recommended as the basis of the corn crop, arising from an erroneous opinion in a few, that the roots of corn and most other herbaceous plants, seek their food only near the surface; whereas the roots of wheat will penetrate four feet of tilth, and those of corn will strike still deeper. An objection that the roots of the latter will not reach the reservoir of food provided for them in the deep covered litter of an inclosed field, would therefore be erroneous.

No grain exhibits so many varieties, or is so liable to change as the maize; the preferred species can only be preserved or improved by selecting the seed at the time of shucking; this will also prevent its exposure to a sweat, and produce its better vegetation; and it increases the crop, which is deeply influenced by the length of the grain.

ARATOR.

MERINO SHEEP.

We learn from a St. Louis paper, that this valuable animal is already introduced into Upper Louisiana; where it promises to flourish in great perfection, supplying the inhabitants of that interesting country with additional sources of independence and even luxury.

THE

CONSTITUTION

OF THE

MERINO SOCIETY

OF

THE MIDDLE STATES OF NORTH AMERICA.

PREMIUMS PROPOSED FOR 1812 & 1813.

To which are prefixed, some Introductory Observations on the origin, design, and probable advantages of the Merino Society. Some of the objections against Merino Flocks, subjected to the test of recent facts and present experience in the U. States.

Introductory Observations.

On the origin, design, and probable advantages, of the Merino Society of the Middle States of North America. Some of the objections against Merino Flocks subjected to the test of recent facts and present experience.

When we hear of the institution of a society, it is natural to inquire, how it originated. Some of those accidental circumstances, which led to the formation of the Merino Society, are as follows:

While attending the sales at Philadelphia, September, 1810, some of the purchasers agreed to spend that afternoon together The conversation soon gave evidence, that but one sentiment prevailed amongst them, respecting the introduction of the Merino flock. The arrivals of that species of sheep, and the sales which followed, gave further opportunity to converse with one another.

Having all the same object in view, it was soon found, that the purchases placed as a common fund would best meet the common interest; that little more time would be required, to purchase for the use of the whole, than for private account only, the mode was adopted, without

any other preliminaries, than that all purchases should be equally divided at the election of the concerned. It is with much satisfaction we find the enlargement of our flocks, selected from the best importations, grew out of this circumstance. These occasional interviews have produced the most useful information; it was naturally expected, that while the hopes of some were raised high from local considerations, the fears of others were not less carried beyond the proper limits, by the circumstances of the times. The exchange of sentiments generally brought the extremes to a medium. At one of these interviews, when it had been agreed that further purchases were not required, and when the whole of the purchases had been satisfactorily divided, and every one received his flock, it was suggested, that as the interests and knowledge of the members had been increased by these conversations, that equal effects might be produced by a continuance of that mutual information in the management of the respective flocks now procured, not only to those present, but unto all who had become owners of this sort of live stock, and who should unite with and aid the society in promoting useful knowledge. There was but one opinion, the proposal was unanimously agreed unto, and a committee appointed to draft some constitutional rules for carrying into operation a measure so much required to rouse public spirit, to introduce fine wool flocks. Some remarks on the introduction of Merino flocks, public spirit, and manufactures, were admitted, as connected with the subject, and properly introductory to the constitutional rules of the society.

Public spirit appears to be nothing more than another name for the enterprise of individuals, whether in private or public life. The increase and association of such characters alone, convey the name of public spirit to a nation. To acquire this character, a laudable ambition, a correct judgment, and perseverance, are always required. The enterprise or ambition would be worse than lost, unless aided by a correct judgment. It would be consummate folly for an individual or company to attempt

the establishment of a manufacture where the raw materials were not regularly supplied. It would be no less vain for one or more persons to raise the raw materials where there was no manufacture to work it into such form as the country required, or where commerce did not give it a currency. Whether, then, we are raisers or manufacturers of wool, our exertions are so far as reason can anticipate, well directed, and our mutual interests happily combined. It might with confidence be said, that improvement in manufactures cannot long exist, when what are called the raw materials are not generally raised. And unless the raw materials are of domestic origin, home manufacture will ever be subject to those paralising casualties which eventually enervate public spirit, the enterprise of individuals, companies, or societies. Without the raw materials, manufactures, and commerce, we should possess nothing more than the name of independence. Without manufacture and commerce, gold and silver are only capricious visitants, and the world must remain a wildnerness. What converted these rugged hills into sweet scented fields? What removed the forests and opened the fruitful soil? It was manufacture and commerce. What directed the unwearied streams of rivers to perform such extensive, constant, and regular operations, where man seems only the superintendant of its time saving labor? It was manufacture and commerce. In the hands of the manufacturers they now mingle the wealth and luxury of the nations in the lap of our country.

Among the long list of raw materials, wool holds a distinguished place, and has obtained the attention of men of the greatest enterprise. Whether we eye the far famed golden fleece of Argonautic renown, among the ancients; the formerly privileged herds in Spain, her Segovian or Leonese wool packs, or her royal manufacture, or the Rambouillet flocks in the French empire, or the dignified wool sack on the highest bench in the British senate, as if all power emanated from it—What are

these but so many living emblems of the wealth and glory of the nations?

If antiquity give worth to the woolly herd, we hear of none more ancient, none which have more commanded the influence and care of men of renown. Here the examples of fathers, patriarchs, judges, and nobles, kings, emperors, and presidents, outshine all embellishment and declamation; while the mildness and worth of the flocks, afford an important lesson, and fill the nation with treasure more excellent than the gold and silver in the damp mines of Potosi or Peru.

If the efforts of individuals, acting without concert, harmony, or even design, have introduced in a short time, a very uncommon number of the most valuable species of sheep into the United States, is it not presumable, that united and organised social efforts will preserve pure, cherish and extend the number of flocks, and promote the interest of each member, where every individual is supported by and linked to another? When the individual and the whole act as one, where all are combined and linked as one chain to secure the introduction of this sort of live stock, and the variety of manufactures arising therefrom, where united enterprise and mental resources shall hasten the revival of agriculture, by which the worn out farm will be speedily renovated, the flocks will be increased, their immediate reward will be sensibly felt and promptly acknowledged by the now famished fields; yes, fields which but a short time ago were a continued drawback to the farmer, may under judicious introduction of proper flocks, become permanent sources of wealth to the owner.

While the benefit arising from the system shall not be confined to manufactures of wool, or the branches of manufacture arising therefrom, but like the grafts in the national stock, which every where diffuse their excellent fruit, by which the youngest bud and superannuated limb will become active, when every hand will be employed to establish national independence, when the growers of wool will more than supply the manufacture,

with the fine staple, and the manufactured articles shall be more than commensurate for the supply of domestic wants; when our ships shall be employed to carry the surplus of raw materials and manufactured articles to some distant market, and in return furnish us with such articles as the climate or population cannot at this time produce within our limits—Will not this extirpate indolence, and introduce industry with all her smiling powerful train.

This, however, is not to be effected by the cold distant wish, or fine spun and well wove theoretic essays of pretended patriots, whose stock consists in wind; that man, or society, where the whole amounts to nothing more than a well told tale, has no claim to public spirit; where there is not a dollar put to risk for the introduction or support of internal improvement, whose subsistence arises from the labor or industry of others in half yearly dividends, or the more inglorious traffic in promisory stock, equally ruinous to the individuals and the public; these are not examples for us to copy.

Nor are we to consider our duty towards ourselves, our families, or country, complete, when capital alone is engaged in the enterprise, this would more display our cupidity, avarice, and folly, than our public spirit. As well might the merchant leave his ship and treasure to be carried about, the sport of the winds and waves, as the grower of wool, or the manufacturer thereof, leave his live stock and business to the caprice of every imposture. Our industry and perseverance, our stock and fortune, must remain in the closest union. Separation would be ruinous to the whole. While unwearied, increasing and judicious application, shall raise a monument, demonstrative of what continued and correct enterprise can produce. Nor are we to become stationary in possession of that already obtained by every individual composing the society. Greater and better things are still before us; hope has already descried brighter rays; utility, wealth, and glory, irradiate the distant horizon.

Nor is it necessary for us to say what we will do to introduce national improvement. If we gain it for ourselves, we will share it with the nation. If delicious fruits shall be our reward, all shall participate from our plentiful but economical board.

It would be ignoble for us to draw back, because few have or will come forward, for some time, to introduce the Merino flock. If Columbus alone faced all opposition of men and the elements to discover our continent, may not a few boldly assert, and clearly prove, that this enterprise is equally favorable to flocks, as it ha been to men? May we not rather with united force, endeavor to prove that it possesses superior advantages for both; that it will not deteriorate, but improve, the qualities of the pile? This expectation is warranted from the long experience of the Swedes, who introduced the Merino sheep in 1723. They were introduced into Saxony in 1765; an improvement of this pile has taken place; Saxon wool now commands a preference to the Spanish.

The introduction of Merinos into France and Great Britain, is of much later date, but perhaps with greater success and improvement of the carcass and pile. While the two governments have long been engaged in destructive wars, men of public enterprise in both nations have not failed to reciprocate the good offices of useful information to one another, to give their flocks superior excellency. It was from the Rambouillet flock of France that the first Merino ram was imported into the United States in 1801, he was soon followed by others, whose fame had been some years known in this country.

It is a fact well known, that the common wool of the United States is better than that of Europe; and it is equally well known, that the cloths made from it are more durable than those of the same texture imported from other countries. It has been said, that the dryness of our atmosphere is more favorable to the pile of the wool than where greater humidity prevails. The manufacturers inform us, that five piles of our common wool are equal in strength to six of the European. If these

facts have met the inquirer respecting the common wool, is it not reasonable to conclude, that they will be equally well established in favor of Merino wool? We have not a trace of evidence to show, that the climate of Spain, or management of the flocks, are more favorable than in the United States.

It has been said, that the Merinos are too delicate for the extremes of our climate; but experience proves, that they are fed with less expense and risk than any other; and under the same management, they are always found in better plight than those of the common flock, feeding foot by foot.

It has been said, that we have not the same advantages for raising winter feed, which has been so favorable for the increase and support of the flocks in Europe. It might as well be said, that the country was unfavorable to population, when first discovered, because there was little food for man.

There was no demand for winter feed before the flocks were introduced; but now we find winter food, potatoes, turneps, and cabbage, commensurate to the extent of the flocks; and it is presumable, that a few years' experience and enquiry will open other stores of winter food.

Let all who have capital and stock embarked, unite, to promote the good, the interest, and the honor of the whole, thus guarded and secured collectively, the prosperity of every individual shall be promoted: there is no possible injury can arise from the association; unbounded and happy results are to be expected, if conducted prudently.

Unlimited interchange of sentiment will be collected; the knowledge, the experience of all will become the inheritance of every member. Under proper regulations, more solid and satisfactory advantages will be obtained, than if a common stock or flock had been formed. Every member may without an opposite will to control, have his course of experiments limited by his own rules, to present for the inspection of the whole number of mem-

bers, whose remarks will be duly appreciated: hence, a laudable emulation will be kept alive, and private interest secured.

Every individual member may say of his flock, large or small, it is mine; while all the knowledge and experience of the whole, are at his acceptance, he is, at the same time, a sharer of all the honors of the association; his common stock extends no further than the annual contributions to form a fund for the payment of yearly premiums.

Some have objected to the introduction of the Merino flocks, because the quantity of wool raised would exceed the demand, and the price of the sheep and of the wool must decline. The same remarks were made upon the establishment of Merino flocks in France and Great Britain, but the prices of Merino stock have increased as follows.*

Prices of the public sales of Merino sheep, at the Rambouillet Farm, France, the amount in francs and weights of France.

Years.	Average weight of fleeces.	Average price of wool.	Average price of rams.	Average price of ewes.	Highest price of rams.	Highest price of ewes.
1800		1 50	60	78		
1801	7 14	2 5	80	68		
1802	8 3	2 85	333 30	209 88	510	312
1803	9 4	2 88	412 25	236	610	337
1804	8 3	2 92	319 88	336 77	613 19	471 75
1805	8	2 74	369 44	259 91	787	420
1806	7 15	3 33	479 3	413 7	820	550
1807	7 5	3 33	404 58	305 8	715 5	521
1808†	8 2	3 8	605 41	286 59	970	462
1809						
1810					1010	

* † For these notes see bottom of next page.

The rates in Great Britain, averaged:

1806 Rams	£ 14	17 ster.	Ewes	£ 12	7 ster.
1807 Rams	24	15 6 do.	Ewes	20	2 do.
1808 Rams	33	10 1 do.	Ewes	21	12 5 do.
Highest price Rams at last sales			£ 71	11	
Ewes			38	17	
The amount for 17 Rams			371	11	6
The amount for 25 Ewes			620	19	ster.

The quantity of wool manufactured in Great Britain alone will at once show, that the surplus from the United States could not lower the price; the latest agricultural statement suppose 17 millions of sheep the annual stock of England; and it will not be judged unreasonable, if we allow the annual stock of Scotland and Ireland shall amount to 17 millions more, making an aggregate of 34 millions, which, at from 3 to 4 pounds per fleece, will amount to about 120 millions of pounds—to which add the annual importation from Spain of from 7 to 8 millions of pounds, making the annual consumption of her own and Spanish wool above 130 millions of pounds. It will be admitted, that one half of the fine flocks of Spain have been destroyed or exported; her exports of wool to Britain, will of course be reduced to about one half of that hitherto exported to England, whose manufactures, supposing her trade shall not increase as it has done for these last five years, and that it now becomes stationary, will still have a defect of above three and an half millions of pounds in the supply of foreign wools. For if we admit, that she shall grow a considerable portion of Merino wool, that stock will of course occupy the place of

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* From a report made the 14th March, 1811, it appears, that France contains 37,200.000 sheep; 5,000,000 of which are partial blood, and 200,000 full blood Merinos: the improvement of the whole, it is stated, will produce an annual national gain of 32,000,000 francs

† In this year, and the preceding, a number of Ewes were the refuse of the flock, which accounts for the depreciation in the average price of the Ewes.

the common stock, and still above three and an half millions of pounds are wanted, to make up that quantity formerly raised from her own and the Spanish European dominions. In 1805, 6, and 7, the annual average of Spanish wool imported into London and Bristol, was above seven and an half millions of pounds. From what quarter can a supply be sent with so much advantage as from the United States? And what else would so advantageously add such an immense amount annually to the capital of the United States? The exportation to Britain, to supply the decrease supposed to arise from the destruction and exportation of the breeds from Spain, would require the wool of above One Million of Merino Sheep!

But it is not reasonable to suppose, that the domestic manufacture of wool will increase with the growth of the Merino wool in the United States. Why then are not flocks to be raised to supply an almost certain demand for wool? The increase of flocks and the growth of wool, cannot be paralised by importation from Russia, as the raising of hemp and the manufacture of iron have been of late, by importing the raw materials from that country, which takes nothing but gold and silver in return, for those very articles which we ourselves might, if protected, and the cultivation properly established, supply not only our own, but most of the markets in Europe. Let it not be deemed an unreasonable anticipation, to predict not only the exportation of wool, hemp, and iron, but of superfine broad cloth: manufactures are daily rising, which dispel all doubts on this point. The great increase of Merino stock will contribute towards such establishments, as hitherto have been considered at a great distance, if the sales of tobacco and cotton have become heavy, and those funds of the planter dried up, let new establishments produce more permanent streams.

Many things require immediate attention; rules for the choice of a flock; the comparative advantages of full blood and of mixed flocks; the proportional numbers

which can be kept at the same expense; the best means of introducing and increasing the breed, full or partial blooded Merinos, among the yeomanry; the introduction of good intelligent shepherds; the discovery of the causes and means of cure of the various diseases of sheep; the improvement of the form and weight of the carcass; the best and safest mode of feeding in summer and winter, a comparative view of the various kinds, and the expense of winter feed; the improvement of the pile and weight of the fleece. To obtain and diffuse information on these, and a vast number of other important cases, which daily experience shall invite, we hereby form ourselves into a society, under the name and title of

THE MERINO SOCIETY
OF THE
MIDDLE STATES OF NORTH AMERICA,

Under the following Constitution, Rules, and such Bye-Laws as shall be found necessary for carrrying our designs into operation.

Article I. The officers of this society shall be a president, vice-president, treasurer, secretary—and committee of correspondence, the number of which to be fixed at every election.

Art. II. The meetings of the society to be held at the houses or farms of the members, where the flocks are kept, on the first Saturday of every month throughout the year, and at every such meeting, the flocks shall be inspected by the members present. The place of meeting shall be in alphabetical rotation; if two members have the same claim, seniority shall have the preference. The first meeting shall be held on the first Saturday of July next; the first Saturday of July, thenceforth, each and every year, shall be the anniversary meeting of the society, and the officers for the ensuing year, shall be ballotted for on that day.

Art. III. The members of this society shall be resident and honorary. But all persons having flocks, in the

states of New Jersey, Pennsylvania, Delaware, and Maryland, shall be elected as resident members.

Art. IV. Two members recommending any person, at a stated meeting, such recommendation shall be recorded, and the person shall be balloted for at the next stated meeting; but no person shall become a member unless by the unanimous vote of the members present. The secretary shall immediately give notice thereof, to the person elected, who shall thereupon become a member, unless he shall advise to the contrary within thirty days of the receipt of the notice.

Art. V. Every resident member shall subscribe to the Constitution, and pay into the hands of the Treasurer ten dollars, and the like sum each and every year, on the first Saturday of July, until the number of members shall warrant the reduction of the annual contribution, but the initiary sum shall not be reduced, but it may be enlarged, and any person neglecting or refusing to pay the annual quota, above the space of one year, shall cease to be a member, and all right and title shall be forfeited, unless by re-election.

Art. VI. The committee of correspondence shall invite the communication of information from every quarter, upon the subjects for which the society is organized, and deliver the same to the society.

Art. VII. The society shall, at their anniversary meeting, each and every year, propose such subject for competition as they shall deem worthy, to be put on the list for premiums, and at least one annual premium of fifty dollars for communications or improvements, which shall be adjudged to the best, on some of the subjects which shall have been proposed by the society, for the year; the premiums shall be distributed to meritorious communications or discoveries, even in cases where no competition exists; and where merit is not observed, competition shall not give a claim to the premium.

Art. VIII. The premiums shall from year to year be

distributed indiscriminately, to such as are or are not members of the society. The claimant shall at least, however, possess one full blooded Merino Ram and Ewe.

THE MERINO SOCIETY
OF THE
MIDDLE STATES OF NORTH AMERICA,

Propose to adjudge the following Premiums on the first Saturday of July, 1812.

I To the author of the best Essay, on either or comprehending the whole of the following subjects, a *Premium of Fifty Dollars.*

1st. The best rules for making choice of a flock, and the comparative advantages of the mixed and full blooded Merino flocks.

2d. The cheapest and best mode of supplying summer and winter food, particularly for ewes and lambs, with estimates of the expenses of raising the food, and procuring it at market, attested by actual experiments, stating also the daily consumption of winter feed per head.

3d. The best means of introducing judicious shepherds.

4th. The best means of preventing and also curing the diseases of sheep in the Middle States.

5th. On folding, the best manner of erecting the folds, and application thereof for the improvement of the farm.

6th. The comparative advantages and disadvantages of the flocks of sheep above other live stock.

II To the shepherd who shall have the ewes and lambs in the best plight, and under the best government, and shall have obtained the greatest proportional increase of the flock, during the preceding year. The flock shall not consist of less than one hundred ewes, all partial, or full blooded Merinos.—*Fifty Dollars.*

III. To the person raising and producing the best yearling ram, the quality and quantity of the wool, the form of the carcase and live weight of the animal, are to be taken into view.—*Thirty Dollars.*

IV. To the person raising and producing the best yearling Ewe, under the above recommendation—*Twenty Dollars.* This and the foregoing premium shall be then adjudged, provided, at least three Rams and three Ewes, have been brought forward in competition, by three or more different persons.

Premiums under consideration for 1813.

I. To the person who shall have taught any dog, a native of the United States, to perform such useful services among the flock, as those dogs which have been, or may be imported before the time when the trial shall be made.—*Fifty Dollars.*

II. To the person who shall have raised green food, which shall have increased the milk of Ewes in the months of March and April, at such expense as shall render it practicable and advantageous to every farmer. Cabbage, potatoes, winter grain, oats, and burnet are excluded.—*Fifty Dollars.*

III. To the person who shall have made the most satisfactory experiments, to show which of the following plants can be cultivated to the greatest advantage to the farm, and as winter feed for sheep. Turnip rooted cabbage, turnip cabbage, turnips, carrots, parsnips, potatoes; the experiments shall be made on not less than three of the above roots, and not less than two acres cultivated with each particular plant.—*Fifty Dollars.*

☞The Society will increase the amount or number of premiums in proportion as the funds shall come into their hands.

In May next, the place of meeting and adjudging the premiums for 1812, will be duly advertised; in the mean time communications to be addressed to the Secretary, near Wilmington, (Delaware.)

At a meeting of the Merino Society of the Middle States of North America, July 6th, 1811, the preceding articles were unanimously adopted, as the constitutional rules of the Society, and the following gentlemen were elected officers for the ensuing year:

President,
James Caldwell, Esq—Haddonfield, New Jersey.
Vice President,
E. J. Dupont, Esq—Brandywine.
Treasurer,
John Warner, Merchant—Philadelphia.
Secretary,
William Young, near Wilmington—Delaware.

Twelve members were elected the Committee of Correspondence for the present year, viz.
His Excellency Edward Lloyd, Governor of Maryland.
His Excellency Simon Snyder, Gov. of Pennsylvania.
Samuel Ingham—Bucks, Pennsylvania.
James Mease, M. D.—Philadelphia.
Peter Bauduy—New Castle, Delaware.
James Yard, Merchant—Philadelphia.
George Logan—Pennsylvania.
Richard M. Cooper—New Jersey.
William Anderson—Chester, Pennsylvania.
William D. Phillips, New Castle, Delaware.
William Buckley—Lancaster, Pennsylvania.
Colonel Robert G. Johnson, Salem, New Jersey.

NATIVE OIL.

Finer and sweeter oil, no country can supply, than what we can, with little trouble and expense, prepare for ourselves. The tall annual *Sun Flower* will prove this. Its *Seeds*, bruised and pressed, will yield an oil as sweet and as fine as that we import from Florence. From a bushel of this seed, a gallon of oil may be drawn; and with this advantage, that it can be obtained at any time, quite soft, bland, and fresh. The seed, also, and moss, that remain, after the expression of the oil, are of excellent use to feed and fodder hogs, poultry, &c. But, besides these uses, the growing plant is of eminent service. It having been proved, that near twenty times as much pure dephlogisticated air is exhaled from one plant in twenty four hours, in light and clear weather, as a man respires in a vitiated and impure state in that space of time. Hence, the inhabitants of close, ill aired, and unwholesome places, should be diligent in its cultivation.